**DATE PREPARED: 5/18/2016** 

TITLE: NETWORK ENGINEER

JOB PURPOSE: This position is responsible for the administration and maintenance of the City's IT

network infrastructure including network security, data center management, network connections and communication links. This position is also responsible for server installation in a virtual environment, managing the operating systems, the security and integrity of data, and project management in these areas.

### **JOB DUTIES:**

- 1. Ensure the reliable and secure operation of the city-wide network. This includes planning, installing, configuring, maintaining, and supporting all local and wide area network connections, servers, associated software, and communication links. Must be able to monitor the network and correlate events in the logs.
- 2. Manage, monitor and optimize Windows operating systems (Server 2008 / 2012), virtual servers and related components to achieve high availability and performance of the various business applications supported. This includes designing, installing, configuring, securing, administering, and fine-tuning those components across the organization timely and efficiently.
- 3. Ensure the secure operation of the web servers, mail servers, file servers, and application/database servers, desktop systems and network connections, including checking server and application logs, scrutinizing Internet and network traffic, intrusion prevention and detection systems, establishing and updating enterprise-wide virus scans, security patches/updates and troubleshooting. Assigned work will involve analyzing and resolving security and vulnerability issues from internal and external sources timely and accurately, conducting user activity audits where required, and verifying HIPAA, PCI, and CJIS compliance.
- 4. Ensure the uninterrupted operation of e-mail messaging systems and related hardware and software by planning, installing, configuring, and maintaining all network connections and communication links including firewalls and filters. Analyze and resolve end-user messaging program and connectivity issues and provide end-user training where required.
- 5. Establish and monitor network backups and ensure the security and integrity of data, data systems, and data networks throughout the organization by implementing, monitoring and maintaining disaster recovery processes for re-establishing servers, databases, and operating systems in the event of a disruption, both minor and catastrophic.
- 6. Responsible for installing, configuring and administering VMware vSphere for test and production environments.
- 7. Administer, configure, and support mission-critical municipal software applications in a complex IT environment.
- 8. Provide second tier support to Helpdesk issues and provide back-up on first tier issues.
- 9. Maintain documentation for network systems, processes and issues in a current manner.
- 10. Participate in projects as required and provide project management on assigned projects from planning through implementation.



- 11. Maintain complete and accurate inventory of all end infrastructure hardware, software, licensing, and maintenance agreements.
- 12. Assist in the development of new programs and applications.
- 13. Contribute in the development and implementation of IT policies and procedures
- 14. Provide after-hours on-call duties.
- 15. Remain current on changing technology.
- 16. Perform other duties as assigned.

#### **JOB QUALIFICATIONS:**

- 1. Bachelor's degree in the field of Information Technology or equivalent.
- 2. Networking and/or Security certifications desired.
- 3. Minimum five years' experience in supporting, administering, and securing an enterprise-level networking and Microsoft server environment.
- 4. Substantial experience in Project Management.
- 5. Must possess valid driver's license.

### **CRITICAL SKILLS/EXPERTISE:**

- 1. Ability to support, interact and maintain an effective relationship with all levels of users demonstrating a high level of customer service skills.
- 2. Ability to develop and maintain positive relationships with vendors and to coordinate vendor assistance.
- 3. Knowledge of routine operational duties required in an information technology environment.
- 4. Demonstrated proficiency in installing, configuring, upgrading, troubleshooting, maintaining and administering the following:
- LAN/WAN (vLan, TCP/IP, DNS, DHCP)
- Switching and routing
- Firewall URL filtering & ACL's (SonicWall)
- Network monitoring (SolarWinds)
- Network Security Best Practices
- VPN Setup and Administration (SSL, IPsec)
- Virtualization Technologies (VMware)
- Virtual Desktop Technologies (Horizon View)
- SAN and NAS Technologies
- Blade Server Technologies

- Active Directory and Group Policy
- Microsoft SQL maintenance & recovery
- MS Exchange (OWA, Spam Filter, Active Sync)
- Windows Server 2008 and 2012
- Windows 7 and 10
- Anti-virus and backup technologies
- SSL certificate management
- VoIP Telephony

- 5. Strong Knowledge of Networking and Security Concepts.
- 6. Working knowledge of high-availability environments (Windows / VMware Clusters and SAN Replication).
- 7. Knowledge of server, system and database administration.
- 8. Ability to review issues logically using strong analytic skills with attention to detail, applying necessary troubleshooting skills and following up as needed.
- 9. Ability to work independently and have good judgment as to when supervisory assistance is needed. Ability to take direction when needed and to identify and respond to critical situations.
- 10. Ability to read, understand and apply procedures from technical system guides.
- 11. Ability to remain organized and set appropriate priorities, multi-task, and identify and respond to critical situations under pressure and with time constraints.
- 12. Knowledge of or ability to learn HIPAA, PCI and CJIS compliancy.
- 13. Ability to effectively communicate technical information verbally and in writing.
- 14. Ability to compile, prepare and maintain important documentation in an orderly manner for later reference.
- 15. Ability to adapt to and support operational and technological change with flexibility, openness and a desire to learn.
- 16. Ability to work well in a team environment.
- 17. Ability to maintain a valid driver's license.

### PHYSICAL REQUIREMENTS OF THE JOB:

I. Job Requirements: (in terms of an eight (8) hour day)

Sit	1	2	3	4	Х	6	7	8
Stand	Х	2	3	4	5	6	7	8
Walk	Х	2	3	4	5	6	7	8
Active	Х	2	3	4	5	6	7	8
Movement	Х	2	3	4	5	6	7	8

## II. Movements:

Type of Movement	Seldom < 25% of the Time	Frequently 25%-75% of the Time	Continually > 75% of the Time
Bend/Stoop	X		
Squat	Х		
Crawl	X		
Climb	Х		
Reach Above Shoulder level	Х		
Kneel	X		
Balancing	Х		
Pushing/Pulling	Х		
Repetitive Foot Movement	X		
Repetitive Hand Movement		Х	

# III. Weight Carried:

Amount in Pounds	Seldom < 25% of the Time	Frequently 25%- 75% of the Time	Continually > 75% of the Time
0-10 lbs	X		
11-24 lbs	X		
25-32 lbs	X		
35-50 lbs	Х		
51-74 lbs	X		
75-100 lbs	Х		

# IV. Weight Lifted

Amount in Pounds	Seldom < 25% of the Time	Frequently 25% - 75% of the Time	Continually > 75% of the Time
0-10 lbs	X		
11-24 lbs	Х		
25-34 lbs	Х		
35-50 lbs	Х		
51-74 lbs	Х		
75-100 lbs	Х		

### V. Job Requires:

Requirements	Yes	No
Working on unprotected heights		Х
Being around moving machinery	X	
Exposure to marked changes in temperature and humidity		Х
Wearing of personal protective equipment		X
Driving automotive equipment	Х	

### VI. Potential Exposures:

A. Physical: Moving computer equipment.

B. Chemical: None.

C. Biological: None.

VII. Discuss the job requirements for the following, including whether a disability could be reasonably accommodated.

A. Vision: View computer screens, read instructions/technical manuals. Correctable.

B. Hearing: Attend meetings, answer telephone, personal contact/inquiries. Correctable.

C. Speech: Answer telephone, make oral presentations, train/instruct City employees on applications. Correctable.

VIII. Is the work area currently accessible to individuals in a wheel chair or other assistive equipment? If no, what accommodations could be made?

Yes.